# **USSR** Report

ECONOMIC AFFAIRS

No. 931



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### USSR REPORT

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#### ECONOMIC POLICY, ORGANIZATION, AND MANAGEMENT

#### RECOMMENDATIONS DEALING WITH SUBCONTRACTOR COMPETITION

Moscow ERONOMICHESKAYA GAZETA in Russian No 14, Apr 80 p 6

[Text] The CPSU Central Committee and USSR Council of Ministers Decree "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Work Quality" anticipates the continued development and strengthening of long-term economic ties, increasing the responsibility of all social production participants for achieving high national economic end results.

Solving this problem will be facilitated in considerable measure by competition among the collectives of subcontractor enterprises and organizations, which practice has received a high evaluation in the greetings and speeches by Comrade L. I. Brezhnev, General Secretary of the CPSU Central Committee and Chairman of the USSR Supreme Soviet Presidium.

These recommendations were worked out on the basis of a generalization of leading experience in competition among subcontractor collectives which was accumulated in construction of the Krasnoyarskaya, Nurekskaya and Sayano-Shushenskaya GES's, the Atommash, and also by collectives of the Volga Automobile Plant and Leningrad Transport Center, by beet growers of Yampol'skiy Rayon in Vinnitskaya Oblast, and by many others.

The purpose of competition among subcontractor collectives is:

to achieve best end work results, increase output, expand assortment, and improve the quality, reliability and durability of products;

to reduce construction time and accelerate the start-up of production capacities;

to continue developing business contacts, interrelationships and mutual assistance among subcontractors and branches;

to create for one's partners conditions most conducive to even, highly productive work.

Competition participants are determined by mutual agreement as a function of the tasks facing the parties. In this regard, each association, enterprise, organization and subdivision can participate in other groups of competing subcontractors and have cooperation agreements with them.

- 1. Agreement On and Terms Of Socialist Competition
- 1.1. The organizational basis of subcontractor competition is an agreement concluded among the collectives of subcontractor enterprises and organizations and their subdivisions on whose work successful fulfillment of the production and marketing of end product plan and the plan for construction and start-up of a project or production capacity depend.
- 1.2. Any collective can initiate the concluding of an agreement to compete. But experience shows that the initiator is generally the enterprise (organization) which produces (markets) the end product in the technological chain of subcontractors, which puts the product into operation or masters and operates new facilities and production capacities.

The initiator collective works out a draft of agreement obligations and sends it to the collectives of subcontractor enterprises and organizations which refine the draft on the basis of their actual potential. Working groups or commissions can be created to develop individual points in the draft agreement more thoroughly by the subcontractors.

1.3. The agreement must contain:

the obligations of the collectives participating in the competition, aimed at prompt (ahead of schedule) fulfillment of assignments on cooperative deliveries, construction site orders, and the creation of conditions conducive to putting capacities and projects into operation successfully. The specific content of the obligations is determined by the features of the economic ties and reciprocal demands of those competing with one another; joint measures to ensure that these obligations are met;

the terms of the subcontractor socialist competition.

- 1.4. It is recommended that the agreement be adopted at meetings, conferences and aktive of workers, engineering-technical personnel and employees of the competing enterprises and organizations or their representatives. On instructions from the collectives, the agreement is signed by representatives of the administration, public organizations and by leading production workers from subcontractor enterprises and organizations.
- 1.5. Both the procedure for including new participants and the period for which the agreement is to be in force are set by agreement of the parties. When economic ties are long-term, long-term agreements broken down by year should be concluded.
- 1.6. The terms of the subcontractor socialist competition outline: the goals and main tasks towards whose solution the competition is oriented;

the range of competition participants;

the composition and functions of the joint organ coordinating the activity and regulating the interrelationships of those competing, as well as its working sections, groups, and so on; the indicators on whose basis the results will be summed up; the procedure, schedule, place and frequency with which the results are to be summed up;

incentives for the winners; the forms and methods of exchanging work experience.

- 1.7. The competition indicators must be concrete, comparable and must orient those competing to achieving the best results by all participants. They must first of all reflect progress in meeting plans for delivering output in the products list (assortment) and time periods conforming to the agreements (orders) concluded.
- 2. Coordinating the Activity of Competition Participants
- 2.1. In order to coordinate the activity of participants in the competition among subcontractor enterprises and organizations, to exercise constant, flexible supervision and recording of the fulfillment of agreed-to counter plans and obligations, to ensure extensive publicity for the competition, to reveal and disseminate the experience of its leaders, and to carry out mutual assistance measures, it is appropriate to create coordination councils, public subcontractor staffs from among the economic leaders, public organization representatives and collective workers participating in the competition for a period outlined in the agreement.
- 2.2. The councils (staffs) generally create working commissions (sections) to monitor the following of delivery schedules, work quality, the organization of leading-experience propaganda, public catering, labor protection, personal services and other items, as well as a working group whose task involves preparing draft resolutions, handling documentation, exchanging information, and so on.
- 2.3. Interbranch subcontractor councils consisting of representatives of appropriate ministries (departments) and central (republic) trade-union committees can be created to solve especially important problems. Interbranch councils can also be created under the republic, kray and oblast trade-union councils where enterprises producing (selling) the end product or building and putting production capacities and facilities into operation are located.
- 2.4. Interbranch and coordination councils (public staffs) of the subcontractors quickly review and solve problems associated with meeting obligations and schedules, with the quality of production problem decisions, and also problems of a social, cultural and personal-services nature.
- 3. Summing Up Competition Results
- 3.1. Competition results are summed up by the coordination council (public staff) usually at least once a quarter and also upon completion of intermediate assignments linked to ensuring the start-up of capacities (stages), facilities and the complex as a whole. The decision by the council (staff)

is sent out to both the superior economic and trade-union agencies concerned and to all participants in the cooperation.

- 3.2. In the course of preparing for and summing up the results of the competition, thorough analysis of the actual state of affairs should be ensured, the activity of all competition participants should be evaluated objectively, and their efforts should be focused on eliminating shortcomings revealed, on successfully resolving the tasks put before the collectives in the next stage of the competition.
- 3.3. The following occurs during the course of this work:

a mutual check of fulfillment of plans, obligations and the competition agreement, production and delivery schedules, construction-installation work and the receipt of estimate-planning documentation;

competition leaders and collectives not meeting contract obligations are determined, and the factors resulting in success for the best collectives and causing lag among the others are revealed;

unused production reserves are revealed and steps are determined to bring them into play;

measures are worked out to disseminate leading experience and to pull up laggers.

- 4. Encouraging Leading Collectives
- 4.1. In order to encourage the collectives of enterprises and organizations leading subcontractor competition, the coordination council (public staff) of the ministry (department) or enterprise (association), jointly with the corresponding trade-union and soviet agencies, can institute challenge Red Banners, pennants, diplomas, honorary testimonials, certificates and other moral incentives for each group of participants.
- 4.2. Workers, engineering-technical personnel, and employees of shops, departments, sectors and brigades who have done most to facilitate successful fulfillment of the contract obligations can be awarded bonuses, generally from enterprise (organization) funds where they work. It is appropriate to award bonuses to subcontractor competition winners with consideration of the opinion of the coordination council (staff).

In accordance with the CPSU Central Committee and USSR Council of Ministers Decree "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Work Quality," production associations (enterprises) must direct bonus funds from the material incentives fund and the wage fund foremost into providing incentives to improve qualitative indicators and meet obligations to deliver output in accordance with the agreements (orders) concluded, with consideration of socialist competition results.

4.3. It is appropriate to take subcontractor competition results into account when summing up the results of republic and unionwide competition in the branch.

- 5. Publicizing the Competition and Disseminating Leading Experience
- 5.1. With a view towards publicizing socialist competition and disseminating the leading experience of its participants right in the associations, enterprises, organizations and their subdivisions (shops, sectors, brigades, links) and in ordinary construction towns, use must be made of indicator boards and competition screens which reflect progress in meeting obligations and the agreement, as well as specially drawn-up displays, posters, slogans and information bulletins.
- 5.2. Competing collectives must constantly inform one another about their achievements in organizing socialist competition, labor, production and management, improving personnel skills, and so on.

In order to solve the most important technical problems and eliminate "bottlenecks" in the production activity of subcontractor collectives, it is appropriate to create joint creative brigades of leading production workers and
innovators, inventors and efficiency experts, the scientific and engineering-technical community, and to orient workers, engineering-technical personnel and employees of allied occupations and positions towards on-the-job
or ordinary training for subcontractors.

5.3. The ministries, departments, central, republic, kray and oblast tradeunion committees and councils ensure the prompt study and rapid dissemination of experience in organizing competition among collectives of subcontractor enterprises and organizations.

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CSO: 1820

#### ECONOMIC POLICY, ORGANIZATION, AND MANAGEMENT

#### PROLIFERATION OF 'CONTROL' COMMISSIONS RIDICULED

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 12 Apr 80 p 2

[Article by G. Porozhenko: "Is A Commission the Creator?"]

[Text] "...Let there be a downpour or a blizzard, let it be 40° in the shade, even let me be fighting with my wife or let the devil himself appear -- but just let one day go by in our association in which it doesn't do anything...."

"The 'Vtorchermet' Commission, Yuriy Viktorovich," says the secretary, coming in and fearlessly breaking into these fanciful thoughts. "First, as does everyone else, they demand to see the general director, but the firemen boarded Anatoliy Fedorovich just last night, so...."

"I have the technical council in five minutes," pleads Yu. Stopchenko, chief engineer of the "Magnit" production association in Novocherkassk, brought crashing down to earth. "Perhaps they could see the deputy director for science?"

"The deputy director for science is up to his neck in people looking for work, the deputy director for production is clogged up with civil defense," says the secretary, with a wag of her finger, "and the deputy for commerce isn't seeing anyone at all: he's with the GAI [state automobile inspectorate] commission.... You alone, of all the supervisors, are not involved with anything right now...."

"Send them in," says the chief engineer hopelessly, throwing up his hands and adding the afterthought: "Wishful thinking -- blizzard, wife, demon, devil -- phooey!.... There never was and never will be a day here without any commissions. Write the newspapers about it!"

And so we found out that last year the Novocherkassk "Magnit" association, and first and foremost its leadership, had to endure the onslaught of 57 verification commissions which stormed the association in the name and on the instructions of the most varied local and national agencies, including the association's own Ministry of Instrument Making, Automation Equipment

and Control Systems. In sum, those verifying, inspecting, auditing, investigating and so forth spent 600 man-days at the "Magnit" association. And losses of association workers to prepare all manner of reports and information for the commissions are at least twice as much, according to the most modest estimates.

Things have not gotten any easier since the beginning of the year: there were already eight commissions in January, and more and more have been running around since. "I am in no way a proponent of unmonitored work," the "Magnit" chief engineer reflects somberly, "but it is the work itself that is suffering from such unrestrained monitoring. The results of these checks do not enable you to plan measures or tell you where to carry them out...."

Where, we wondered, is this zeal coming from? What draws so many verifiers to the "Magnit"? Perhaps consistent failure to carry out the plan or an epidemic of defects? No, when this question was aired at the Ministry, it was made clear that the "Magnit" association, while not free of sin, was completely up to date in terms of coping with the plan regarding all basic indicators and regarding quality, and for more than one five-year period now.

And when we became more familiar with the commission side of the matter, several curious things were revealed. It turns out that the law does not state the number of agencies entitled to monitor industrial enterprises. In addition to the ones cited here already, other numberless inspectorates, auditors, monitors and so on are also called on to check plants and factories, combines and associations.... On the other hand, it is completely obvious to all and sundry that we cannot do without comprehensive monitoring.

But here is what happens: they rush in rank and file, each on its own schedule planned in advance, to the enterprise being monitored, piling on top of one another and quite often openly duplicating each other's purposes.

For example, a multipurpose ministry commission of eight persons visited the "Magnit" association for 20 days this past year to audit its economic activity. The association leadership was unable to find space for the departmental auditors in the hotel and offices, since a new brigade descended on them from the Ministry to survey the status of mechanization, technology and deliveries. Just then another three people appeared from the party raykom to see how things were going with scientific-technical progress, mechanization and automation. As we see, the questions are identical, but the commissions are different, which is why each demands special attention and special reports, summaries and other verification documents, which are in fact as alike as two peas in a pod.

We do not know if a representative of the Northern Caucasus Metrology Center was acting in accordance with the plan in checking on the introduction of All-Union State Standards at the "Magnit" association. We know only that he was the record-holder among those running checks in 1979, using a very modest travel-authorization allowance of 45 days! The possibility is not excluded that this was made possible through the disinterested support of

senior colleagues at the State Standards Committee, by the amicable fivesome which visited "Magnit" on those same days on a similar check. But a week after successfully repulsing the record-holder, "Magnit" was again sent a metrologist by the Northern Caucasus Center to find out if Ali-Union State Standards on producing consumer goods were being followed here. His famous predecessor was evidently incapable of performing this one-day task.

That's enough. The more so, since many other economic leaders have reported similar instances of confusion in the work of several monitoring agencies to the newspaper. They complain about the abundance of commissions, and primarily about the "lack of any presence" in coordinating these ctions. All this knocks more than just the leaders of the enterprises being monitored out of their accustomed labor track.

In order to somehow bring order to working with verifiers, that same "Magnit" association has even created a special regulation which delineates in black and white which leader must deal with what specific commissions. This forced measure might make the lot of leaders of the "Magnit" link somewhat easier. However, the problem of the domination by commissions is not any way removed from the agenda by this. The more so since, as was already stated here, all commissions are needed and important.

What is the way out?

"We haven't found it yet," is the honest admission by N. Gorelikov, chief of the "Soyuzelektropribor" all-union production association of which the "Magnit" association is a part.

Perhaps a final and decisive battle can be waged against their domination by creating a commission on centralizing and coordinating the actions of all commissions? What?

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#### PLANNING AND PLAN IMPLEMENTATION

ACADEMY OF SCIENCES SCIENTIFIC COUNCIL: PLANNING IMPROVEMENTS

Mowcow EKONOMIKA 1 MATEMATICHESKIYE METODY No 2, Mar-Apr 80 pp 388-392

[A.G. Chulyukina report: "In the USSR Academy of Sciences Scientific Council on the Problem 'Optimum Planning and Management of the National Economy'"]

[Text] An expanded meeting of the bureau of the USSR Academy of Sciences Scientific Council on the comprehensive problem "Optimum Planning and Management of the National Economy" devoted to a discussion of avenues for scientific research in light of the CPSU Central Committee and USSR Council of Ministers decree "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Work Quality" of 12 July 1979 took place in Moscow 28 September 1979.

The opening address was made by chairman of the Scientific Council Academician N.P. Federenke. Having distinguished the four most important groups of problems on which the council has to work (improving planning methodology, improving the economic mechanism, the organizational structures of management, and the information and technical base of planning and management), Academician N.P. Fedorenko emphasized that in accordance with the decree under discussion in the council, each of them requires further development. He noted in particular that research on the organizational structure of management should cover not only its two- and three-link stages, but the most important thing—the rights and obligations of structural links—from the top levels down to the shop and each working place. Programmed and purposeful planning plays a most important role in solving problems or the organizational structure.

The present-day economy of the country is characterized by its enormous scales, the increasing complexity of interrelationships, and rapid rates of economic growth. In his time Sergo Ordzhonikidze knew each morning how many bricks had been laid at Magnitka. Now we have more than 300,000 enterprises. Some 12 million kinds of output are now produced and most of them are replaced in less than 10 years. Great significance attaches to the problem of the limited nature of natural, labor and other resources,

the growth of the production apparatus and so forth. Extensive factors in the development of the economy are being exhausted and the intensification of production is becoming central. Academician N.P. Fedorenko proposed the organization in the council of discussion dealing with this range of questions.

The recently adopted decrees on the econc ic mechanism have a most important cole in the business of production intensification. In addition to the specific ways for solving a number of fundamental problems pointed out in them, these documents raise questions on which further in-depth work must be done. Economiats must aid the USSR Gosplan primarily in working out scientifically substantiated normative acts that would promote the embediment in economic practice of the "spirit" of these decrees. Efforts must be made to make these acts really act on efficiency. Having noted that many of those present at the meeting had participated in drawing up the proposals that were considered when preparing the decree, Academician N.P. Fedorenso expressed his conviction that the members of the Scientific Council are doing everything possible to implement the measures on improving the economic mechanism as intended by the party and government.

In a report by council bureau member A.A. Modin entitled "On the State of Development of the Economico-Mathematical Approach in Economics" the pre-trequisites for use of these methods in managing the national economy were examined, in particular the following:

accurate determination, on the basis of Marxist-Leninist economic theory and party and government directives, of criteria for the functioning of the national economy and the unambiguous matching of these criteria in accordance with the levels of social production;

adequate reflection in formalized mathematical models of the economic laws for the functioning of social production and its individual links as a single national economic system;

the presence of information, essential for the practical construction of mathematical models, reflecting quantitatively manifest laws in the development and functioning of the national economy;

the preparedness of the apparatus for planning and management by all links of social production for the practical utilization of economico-mathematical models developed by the scientific establishments;

provision of planning and economic organs with the necessary program packages and computers for practical utilization in their everyday activity of economico-mathematical methods and models;

legal regulation of the everem for utilizing economics-mathematical methods and models and the implementation of planning and economic decisions reached with their aid.

A.A. Medin emphasized that is eract to create conditions for the practical application of communication methods and computers it is comential to systematically improve the activity of planning and economic organs. The introduction of these methods and techniques is an objective process, a seems of dealing with the growing complexity and labor-intensiveness of planning and management in social production in connection with its In reasingly large scales and the americation of those notional economic reserves that cannot be brought into play using the traditional methods of data processing by band weeks, the basic aim of introducing these models and techniques is in the rest the climical of the national economy and all its branches and links. The investment of resources in new methods and equipment for arganizing the clausing and management of social production is an extremely rifurite measure, On average, throughout the country they are recouped in land than three years. At the name time, in the practical application of these arrivals and this equipment, shortcomings have been seen in the planning and expansion of eclentific research and experimental were, in the functioning of the economic mechanism of the economy and its individual lives, in the preparedness of the apparatus for planning and management of sectal production, and in information and technical backup. The rapp river and lude! that the saving achieved today includes the effect not so made of the application of economico-mathematical methods as of the improvements, lating sempliers, in the existing organization of planning and meagen or of production, that is, imprevenent in the quality of data processing and its acceleration. A.A. Modin presented a detailed analysis of the class of the leading scientific establishments of the country in the field of emponico-mathematical modeling. The system for these plans in Later C

And technical problems, confirmed by the UCAR State Committee
for Science and fechnical; 2. Law plan for scientific remearch in the
natural and social arteness, which, for economic problems in confirmed by
the LOCAR Academy of Sciences, the LOCAR State Committee for Science and
Technology, and the the UCAR Gosplan; 1, a coordination plan for acientific
research work does to the SSB Academy of Sciences Scientific Council on
the problem "Opinum Planning and Management of the National Economy;"
4. a coordination plan for the development of the ASPR [automated system
for planning estimates] confirmed by the USSR Gosplan; 5. plans for work
on setting up the ASPs for the union republic gosplans; 6. the plan
for scientific research work by the USSR Ministry of Instrument Making,
Automation Ludigment, and Control Systems All-Union Soyuzmistemprom [expansion unanown] Association; 7. branch plans for scientific research work.

The integrating document in the system of plans for the development of economico-mathematical methods and models for optimizing planning and the management of the national economy is made up of the state programs for solving scientific and technical problems. They direct the people involved in development toward the preparation of planning material and the creation of ASU's [automated control systems] with specific technological installations, enterprises, production associations and sectors of the national economy. At the same time, insufficient attention is being given in them to conducting scientific research work for the purpose of improving and enhanding the quality of the ASU's developed. Scientific research work is in the main restricted to preparing guidance methodological material and standard planning decisions for ASU development, and also working on programming and technical problems associated with their functioning. However, there is virtually no reflection in this research of questions of economicomathematical modeling for optimizing planning and economic computations in ASU's. The central institutes of the USSR Academy of Sciences and the USSE Complan are not participating in the fulfillment of state programs. All this largely determines the unsatisfactory level of utilization or the complete absence of economico-mathematical methods in a number of ASU's.

Examining plans for scientific work in the field of economico-mathematical modeling, the rapporteur pointed to the duplication of work and the fact that it is not always sufficiently coordinated, and the incompleteness of a number of plans.

A.A. Modin devoted particular attention to the qualitative aspect of research plans. He presented the status of development in economico-mathematical methods and models in the form of a matrix with the columns showing the sectors and spheres of the national economy and the lines the levels of management at which prediction, long-term and current planning, accounting, control and analysis are effected, together with the organization of plan fulfillment. The matrix provided a visual answer to the question of the degree of matching between the leading edge of scientific work and the tasks of improving planning and management of the national economy and its individual links using mathematical methods and computers. The empty spaces on the matrix testify to the unevenness in the spread of those methods and this equipment among the sectors and levels, and also the shortcomings in directed coordination of priorities in the development of research.

The tapporteur noted the unsatisfactory status of "premodel" work on making more precise the fields of application and the essential model types for optimizing planning decisions, and also on generalizing and spreading methods and models developed earlier.

Having distinguished three groups for commice-mathematical models (prediction econometric balance, and primitation). A.A. Modin characterized the degree of development in each of them, and he pointed to the localized nature of many models that are designed only for solving specific planning problems, the limited nature of work on matching models at the national economic and medical development and the lack of work on matching sector and enterprise models.

In conclusion the cappettest attended that further enhancement of the efficiency of social production as the result of the development of automated sytems is not possible without a sharp expansion in the systems of interlinked complexes of committee mathematical models. This all produces a need for tadical improvement of work and the introduction of economicomathematical models into practical work in the management of social production.

The council deputy mairman I.T. Baranov delivered a report entitled "On Measures of the Scientific Legacil to Folfill the 12 July 1979 CPSU Central Committee and USER town if of Ministers decree 'On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Afficiency and work Quality'." He noted that one of the most important or bloom is which the sound I must do further work in the development of the retiral and methodological principles for a system of optimum functioning of the most alist economy. Things were set up in such a way that will recently research in this field was virtually concentrated almost completely will in TalMi [Contral Institute of Economic Mathematics]. The time has tome to expand the range of organizations that are doing similar work, primarily on the regional aspects where even now very little has been into partition in plans of problems such as equalizing the levels of economic development.

In the light of the 1. July 1979 CFS Central Committee and USSR Council of Ministers delice, particular attention should be given to methodological proclems involved in the application of economico-mathematical methods for comprehensively solving economic and social problems, insuring an acceleration in the implementation of accentific and technical discoveries, and making rational use of resources and forming material and financial reserves. Up the agenda are questions of further developing the following with the sid of economico-mathematical methods and computers: plans for the economic and social development of the national economy; purposeful scientific and technical, e onomic and social programs, and also programs for the development of individual regions and territotial-production complexes; and methodology and methods for comprehensive forecasting of the economic and social development of the USSE and the union republics for both the medium-term and long-term periods.

In particular, today work is now in progress in the field of forecasting in a number of the republics, primarily the Lithuanian and Latvian SSR's; interesting work is being done in Belorussia, and recently this kind of research was started in Georgia, Azerbaijan and Uzbekistan. The time has come to bring closer together forecasts for the development of the economies of all the republics and to commence a study of the problems of interregional forecasting.

The council should participate actively in working on problems associated with completing during the 11th Pive-Year Plan the introduction of the AFSA's for the USSA Gosplan and the union republic gosplans. This work should be coordinated with the Gosplan Main Computer Center, which is the lead organization. The council must do its bit in putting in hand initial scientific and technical work here, for the work will not come to an end with the introduction of the ASPR in 1985. TaEMI is now conducting experimental work to prepare for the introduction of a system of models for optimum long-term planning of the national economy in sector and territorial respects, and also a multi-stage system for optimizing long-term plans for development in the sphere of material production. Partial introduction will be effected during this five-year plan, but the most important thing is to prepare everything necessary for the practical utilization of the systems during the subsequent five-year plan.

The question of developing a system of models for optimum long-term national economic planning at the union republic level is naturally associated with this work.

The following problems require further work with the aid of economicomathematical methods and computers:

insuring balance in material and physical and financial proportions in the national economy;

etudying, forecasting and planning the national well-being and making efficient use of labor resources;

methodology and methods for planning the optimum development of intersectorial national economic complexes;

methodology and methods for drawing up programs for the comprehensive utilization of natural resources;

comprehensive improvement of the economic mechanism and its organizational matching with the system of national economic plans;

methodology and methods for long-term planning of economic long-term effect normatives;

improving the system of planned price formation on the basis of the methods of economico-mathematical modeling;

economic evaluation of national economic resourcest

optimizing the planning of economic links and material stocks and

reserves within the system of improving the mechanism for the functioning of the national economy;

methodology for modeling, analyzing and mynthesizing management mystems in the national economy;

data handling for the planning and management systems;

software for solving management and planning problems.

Speaking during the discussion, Academician L.V. Kantorovich (VNIISI [expansion unknown]) noted that during the 20 years that have elapsed since the start of the broad practical application of mathematical modeling in economics, this avenue has undergone tremendous development.

Nevertheless, today, particularly in the light of the 12 July 1979 party and government decree, the problem of introducing optimization methods is extremely urgent. There is a lag here behind theoretical development. It is known that in all scientific and technical discoveries the lead time from the development of the bases to distribution is long. In this case the matter is especially complicated because it is a question of new management methods that differ greatly from those applied earlier. Academician L.V. Kantorovich stressed that the introduction of economico-mathematical methods. as had rightly been noted in the report of A.A. Modin, is of an episodic and unsystematic nature. One of the Scientific Council's most important tasks is to determine what must be done for the further dissemination in practice of these methods and for a real and widespread inclusion of them in the operating system of both central establishments and enterprises. Academician L.V. Kanturovich pointed to the need to work on questions of motivation for workers in introducing these methods: they should have confidence in the effectiveness of the methods proposed for them, and for this, work on analyzing the results of their application is essential.

The following also spoke at the meeting: Corresponding Member of the Ukrainian SSR Academy of Sciences N.C. Chumachenko (Institute of Economics Industry, Donetsk), Yu.A. Oleynik (TBENI), A.I. Khanunov (Kuybyshev Planning Institute), Ye.A. Naumov (USSR Academy of Sciences Scientific Council on the Comprehensive Problem "Optimum Planning and Management of the National Economy").

In a unanimously adopted resolution it is noted that analysis of the status of research on developing and applying economico-mathematical models and computers in the planning and management of the national economy points to the need for improvement in the coordination work to solve priority tasks in implementing the 12 July 1979 CPSU Central Committee and USSR Council of Ministers decree, including: methodological problems in drawing up national economic plans; work on the theoretical aspects of the socioeconomic effectiveness of scientific and technical progress and practical methods to define and stimulate it; research on the economic mechanism for the activity of associations and enterprises; questions of optimum combination of sectorial and territorial management, in particular territorialproduction complexes; and problems of the development and practical utilization of optimization methods under the conditions of the functioning of the ASPR's and ASU's in the various sections of the national economy. After hearing and discussing the reports of A.A. Modin and E.F. Baranov, the Bureau of the USSR Academy of Sciences Scientific Council on the Comprehensive Problem "Optimum Planning and Management of the National Economy" resolved in particular:

to regard as most important tasks for the scientific and organizational activity of the Scientific Council fulfillment of the CPSU Central Committee and USSE Council of Ministers decree "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Work Quality" and the propaganda of specific ways to implement this decree in the practice of planning and management at the various levels of the national economy;

to adopt as a basis the listing prepared by the problems sections of the Scientific Council of avenues for scientific research work for the period 1981 through 1985, stemming from the tasks of the Scientific Council in fulfilling the 12 July 1979 CPSU Central Committee and USSR Council of Ministers decree, and to recommend to scientific research organizations coordinated by the Scientific Council introduction of the necessary clarifications and additions into the draft five-year plan for scientific research in the natural and social sciences for the period 1981 through 1985;

in order to insure coordination of work done in the country in the application of economico-mathematical methods and models in the planning and management of the national economy, to regard as expedient the expansion of cooperation between the Scientific Council and the appropriate councils of the USSR Gosplan and the USSR State Committee for Science and Technology, and also the USSR Ministry of Higher and Secondary Specialized Education and the USSR Ministry of Instrument making, Automation Equipment, and Control Systems, which coordinate the scientific research of subordinate organizations specializing in this field.

CUFFFIGHT: Izdatel'stvo "Nauka," "ekonomika i matematicheskiye metody," 1980

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REGIONAL DEVELOPMENT

KAZAKH SSR OFFICIAL DISCUSSES NEW GOALS

Moscow PLANOVOYE KHOZYAYSTVO in Russian No 4, Apr 80 pp 17-25

[Article by B. Ashimoy, chairman of the Kazakh SSR Council of Ministers: "The Kazakh SSR: Certain Questions of an Increase in Social Production Efficiency"]

(Text) In an atmosphere of high labor and political activeness the working people of Soviet Kazakhstan have developed socialist competition of truly all the people for a worthy greating of the 110th anniversary of V. I. Lenin's birth and the fulfillment of the plans and adopted socialist pledges of the final year of the 10th Five-Year Plan.

The decisions of the CPSU Central Committee November (1979) Plenum and the propositions and conclusions contained in the speeches of L. I. Brezhnev, general secretary of the CPSU Central Committee and chairman of the USSR Supreme Soviet Presidium, at this plenum and at the meeting with the electorate of Moscow's Baumanskiy Electoral Okrug, which provide a comprehensive action program in all areas of communist building, are the basis of this work.

In the current year the working people of Kazakhstan are celebrating a splendid event—the 60th anniversary of the Kazakh SSR and the Kazakh Communist Party. The entire history of the Kazakh SSR, its impressive successes in all spheres of the economy and the flowering of science and culture are inseparably connected with the victory of the Great October, with the name of V. I. Lenin and with the implementation of the Communist Party's Leninist national policy.

As a result of the constant concern of the CPSU Central Committee and Soviet Government and the disinterested fraternal assistance of the great Russian people and other peoples of our country Kazakhstan became a republic with highly developed industry and agriculture.

The particular dynamism in the development of the economy and the implementation of the long-term program of an increase in the people's well-being,

unprecedented in scope, are connected with the consistent implementation of the political course formulated by the CPSU Central Committee October (1964) Pienum and developed by the 24th and 25th congresses of the Communist Party. In the last 15 years the republic's gross social product has increased by a factor of 2.4, national income by a factor of 2.3 and payments and benefits from the social consumption by a factor of 3.4.

The working people of Kazakhstan, like the entire Soviet people, express feelings of profound acknowledgment and cordial gratitude to the CPSU Central Committee and its Politburo, the Soviet Government and L. I. Brezhnev, general secretary of the CPSU Central Committee and chairman of the USSR Supreme Soviet Presidium, personally for their relentless activity to implement the magnificent program of communist building and for their concern for people's welfare.

The republic's industry is now represented by all the main sectors of production and occupies a leading place in the country in the production of many types of output. There has been a considerable development of power engineering, the coal and chemical industries, oil production and refining, ferrous and nonferrous metallurgy, machine building, construction materials industry and also consumer goods production.

industrial Kazakhstan means the mines of Karaganda and the unique coal layers of Ekibastuz, the quarries and encirching factories of the Sokolovsko-Sarbayakoye and Lisakovsk iron ore deposits, the oilfields of Mangyshlak and enterprises of phosphorus industry and mineral fertilizers, ferrous and non-ferrous metallurgy and many others. The most diverse products represent machine building and light and food industry.

A powerful factor of the rapid development of the republic's production forces was the heroic virgin land epic, whose 25th anniversary was ceremonially commemorated in 1979. The assimilation of the virgin land not only raised Kazakhstan's agriculture to a new, higher level, making it the country's biggest granary and a region of developed animal husbandry, but also promoted the comprehensive growth of industry, transport, construction production, science and culture. This was shown strikingly and convincingly in L. I. Brezhnev's remarkable book "Tselina" [The Virgin Land].

Some 500 million tons of grain have been produced since the start of assimilation of the virgin land. In the current five-year plan its average annual production has risen 27 percent compared with the previous one and has constituted 27.5 million tons. The rural workers scored a major success in 1979, cultivating a record harvest and laying 1,262,000,000 poods of grain in the state's bin, including over 1 million poods of wheat. Strong, durum and the most valuable varieties account for more than 70 percent of this.

The production of rice, corn grain, sugar beet, raw cotton, potatoes and vegetables and fruit increased and fodder-crop sowings were expanded thanks

to large-scale land improvement. Much is being done for the comprehensive development of animal husbandry. At the start of the current year the republic had 8.3 million head of cattle, 35 million sheep and goats and many other types of livestock and poultry.

Fulfillment of the tremendous program of capital construction required the creation in the republic of large-scale construction organizations and a strong construction industry base. The successful accomplishment of this task enabled us to build dozens of new cities and hundreds of well-appointed worker settlements, put Kazakhstan's unique mineral wealth at the country's service and create the republic's current potential. It is sufficient to say that in one day the construction organizations assimilate more than R21 million of capital investments and that over 200 new industrial enterprises, large-scale shops and production works and a great deal of housing and cultural-social facilities have been commissioned in the 4 years of the current five-year plan.

The great transforming force of socialism and the CPSU's Leninist national policy have been clearly expressed in the upsurge of public education, the health service and science and culture. Science's contribution to the upsurge of the republic economy is growing constantly. The Kazakh SSR Academy of Sciences, whose institutes are conducting fundamental and applied research in all the most important areas of contemporary science, has become a major science center of the country. Topical problems are being developed by scientists of the instern Department of the All-Union Academy of Agricultural Sciences iment V. I. Lenin and the sectorial scientific research institutes.

The 25th CPSU Congress defined an increase in social production efficiency and work quality at all levels of the economy as a most important condition of the solution of the main problem of the 10th Five-Year Plan. L. I. Brezhnev against emphasized in his speech at the CPSU Central Committee November (1979) Plenum that there is no alternative to this policy and that it must be pursued unswervingly in the 11th Five-Year Plan.

In Kazakhstan, as throughout the country, purposeful and fruitful work is being performed to increase social production efficiency by every means. The republic party organizations and soviet and economic bodies understand full well that there is now no more important and responsible task than implementing this party requirement. It is necessary to commission the deep-set potential for an increase in efficiency and raise this work to a qualitatively new level, which requires big efforts and a creative approach to the questions being solved. They have been put forward by practice itself in the course of realization of the 10th Five-Year Plan quotas and are of urgent significance for the further buildup of the republic's economic potential and an increase in social production efficiency.

The plan of the economic and social development of the Kazakh SSR in 1980 devotes its main attention to a further improvement in high-performance work indicators, an increase in the role of intensive factors of production growth, fuller use of created production potential and an intensification of the policy of thrift.

The full assimilation of capacity represents major potential for an increase in social production efficiency. Purposeful work to solve this problem is being performed in the republic. There has been an increase in the coefficient of the use of capacity in oil refining and the production of steel, rolled metals, magnesium, excavators, bulldozers, rolled equipment, agricultural machinery, cotton and woolen cloth, furniture and many other products.

At the same time the economy is experiencing a shortfall of a considerable number of products owing to the low level of use of certain capacities. There are several reasons for this. One of them is shortcomings in the technical leadership of the development of the sectors on the part of a number of ministries. It is a question of serious miscalculations being made by the scientific research institutes and planning organizations in the development of new technological processes and the planning of enterprises.

For the purpose of reducing the costs of projects expenditure on the creation of experimental production facilities, industrial-testing installations and a repair base is excluded from the estimates, although it is known that planned capacity is successfully achieved where new techniques and equipment undergo preliminary fine-tuning. Thus the incomplete loading of capacity at the Chimkent and Dzhambul phosphorus plants has been caused chiefly by the fact that the planned systems of the preparation of the raw material fail to provide for the requisite heat treatment of the ore. Furthermore, the said technique prevents the use in full volume of fines, of which approximately 5 million tons have been accumulated. Whereas at the Novodzhambul Phosphorus Plant, where the source raw material is agglomerated, the technical-economic indicators were achieved within the normative period. The application of this technique at the operating plants of Chimkent and Dzhambul would make it possible to increase phosphorus production by onethird. Or, another example. The first stage of the Norokaraganda Cement Plant with a capacity of 1.18 million tons on the basis of the progressive technology of cement production in accordance with the dry method was introduced in 1975. But as a result of planning errors and the low working capacity of individual components of the equipment the assimilation of capacity for clinker is not higher than 50 percent.

The further growth of the republic's economic potential is determined to a considerable extent by the development of chemical, coal and oil-production and oil-refining industry, electric power engineering and ferrous and non-ferrous metallurgy, that is, the sectors of industry requiring considerable specific capital investments.

A particular feature of the construction of facilities of the above sectors is the large amount of work performed in remote and sparsely inhabited regions where it is necessary to create a construction industry base and build roads, power transmission lines, water mains, housing and cultural-social facilities from scratch. The solution of these questions demands a different approach to the organization of construction. The creation in these regions of large-scale modern combines for the manufacutre of lightweight structures and components of high plant readiness, which would make it possible to considerably reduce expenditure on and the duration of the construction of facilities, would produce a big savings. These questions are relevant for construction in the countryside also, particularly the construction of new sheep-breeding sovkhozes.

Furthermore, it should be borne in mind that the main problem of the development of new regions is the enlistment and retention of skilled personnel. But in practice many ministries and departments devote paramount attention to the installation of industrial facilities, permitting serious lags to occur in the construction of housing and cultural-social projects. This was the case at the Ministry of Automotive Industry's Stepnogorsk Bearing Plant, where the manufacture of products has already begun, but where only half of the resources at pullited by the plan for housing construction has been allocated. Owing to the shortage of nousing, serious difficulties have arisen in bringing the enterprises up to full strength with skilled workers, and extremely unsatistactory ase is being made of installed capacity. A similar situation has some about at the mining enterprises of the Ministry of Chemical Industry's "Karatau" Association-the mining base of the plants of Kazakhstan and Central Asia producing phosphorus and phosphorus fertilizers. Housing for the nonferrous metallurgy enterprises at the new deposits is being installed with a considerable lagging. Practice insistently demands a radical thange in the approach to construction in the remote regions. The problem of the efficient use of capacity should be solved comprehensively, beginning with the planning and introduction of new technology and the creation of conditions for retaining the trained personnel.

The mineral-raw material resources at the republic's disposal make it possible to not only maintain a high level of the production of ferrous, nonferrous and rare metals and the mining of chromites, phosphorites and other types of raw material but also to secure a considerable growth thereof. Importance is currently attached to the intelligent and comprehensive use of mineral raw materials. The collectives of many nonferrous metallurgy enterprises are performing a great deal of work in this direction. The Balkhash Mining-Metallurgical Combine is extracting all the elements contained in the source material. The fact that the value of the byproduct constitutes more than one-third of the production volume of the republic Ministry of Nonferrous Metallurgy testifies to the high efficiency of the measures being implemented on the comprehensive use of the raw material.

However, questions of the comprehensive use of raw material are not being properly solved at a number of enterprises. This applies particularly to

problems of intersectorial significance. Questions of the processing of waste from the enrichment of the Sokolovsko-Sarbayskiye ores are of great national economic interest. Tests have shown the possibility of extracting valuable products from them and also of reducing iron losses.

Solution of the problem of the comprehensive use of the mineral components of Ekibastuz coals could have a considerable economic impact. Research and industrial tests have determined the possibility in principle of the industrial processing of coal waste, interior-stripping rock and ashes from the burning of coal of the Ekibastuz deposit for the purpose of obtaining alumina, aluminosilicate alloys, various chemical products, cement and abrasives and construction materials. The possibility of the production of cement to satisfy nonferrous metallurgy's requirements in connection with the expansion of the volume of installation work is particularly valuable. Solution of the problem of the comprehensive use of the ash of Ekibastuz coal is also important from the viewpoint of environmental protection.

linearistactory use is currently being made of the refuse ores of the quarries and metallurgical and phosphorus production slag. We believe that the questions connected with processing of the waste of the Sokolovsko-Sarbayskiye ores and the comprehensive use of the Ekibastuz deposit, the refuse ores of the quarries and the metallurgical slag demand immediate solution.

There has been a fundamental change in ore-mining technology at a number of nonferrous metallurgy mining enterprises. The walling up of a worked area and progressive systems of the mining of mineral with the use of power-driven equipment making it possible to more than double labor productivity in mining have been introduced. More than one-half of all underground ore is mined with the application of this equipment, and up to 80 percent at the Dzhezkazgan and Achisay combines.

It is essential to organize the production and increase the supplies of power-driven equipment, particularly small-scale equipment, and spares for a further increase in the volumes of ore extraction and the working of sections which are small, but rich in content at the operating mines and also for securing an increase in labor productivity in operations underground.

The CPSU Central Committee November (1979) Plenum emphasized the need for the preferential development of the country's fuel-energy complex. The solution of this key problem is closely connected with an increase in the production of coal, oil and gas and their rational use. Measures are being adopted in the republic to insure the stable operation of coal industry enterprises and their fulfillment of state plans. However, the enterprises of the "Karagandaugol" Association, which quite recently had the highest labor productivity in the sector and were coping successufly with the quotas, have suffered a reduction in work indicators as the result of lags in preparatory and major operations caused by a shortage of mechanized complexes, breakage and cutting combines and other mining technology and equipment. Difficulties have arisen in carrying out increasing volumes of mining

work in the "ridualizingol" Association also for the same reasons. In speaking of the use of fuel it cannot be considered correct that more than 12 million tens of Karaganda toking soal is used for energy purposes annually because of the lag in the development of the capacities of the enriching factories. An increase in oil production and a reduction in losses of recovered stocks demand an immediate improvement in its production techniques on the Mangyshlak peninsula.

Kazakhstan is a major consumer of oil products, considerable volumes of which it obtains from other regions of the country. The great territorial distance of the consumers is complicating the national economy sectors' uninterrupted provision with oil products and creating strains in the operation of railroad transport. It seems to us that this problem could be solved by the construction in the immediate future of a number of trunk oil-product pipelines and also branches leading off from them to connect adjacent bulk plants.

The production of consenser goods, their quality and assortment and an improvement in the planning of their manufacture are constantly at the center of the attention of the republic party, soviet and economic authorities, and their production is viewed as the material basis of an increase in the people's well-being. Certain successes have been achieved as a result of the work done. Many enterprises of the heavy industry sectors are making an impressive contribution to providing the public with various commodities.

However, the level of production of consumer goods which has been reached in the republic does not correspond to the increased demands. The lagging in the development of errain products on facilities is preventing an increase in the manufacture of hogh-quality products and also a number of commodities for which demand is not ver being satisfied. Thus the raw hide enterprises annually process up to 8 million standard units of raw materials, which is 1.6 times in excess of available capacity. This leads to losses of valuable hides and reduces their quality. An increase in the production of outer knitwear and linen underwear is being held back by the shortage of commercial cotton fabric. A number of machine-building enterprises is also failing to make full use of available possibilities for the manufacture of consumer goods. While possessing a modern engineering base, design organizations and skilled personnel, they are being alow to create specialized capacity. Nor are the corresponding union ministric displaying due persistence here.

In the formulation of manual and long-term plans it is necessary to work up more thoroughly questions of the development of the sectors producing consumer goods, improve the coordination of this work and insure the preferential development of the sectors processing raw materials. The ministries and departments must examine more attentively the local soviets' proposals on questions of an increase in the production and rise in the quality of consumer goods.

As increase in every way in the production and purchases of agricultural products is the daily concern of the party organizations, soviet and agricultural authorities, sovihozes and kolkhozes and all working people of the republic. The main concern is the problem of the stable development of grain production, which is being solved thanks to an increase in yield on the hasis of a rise in the standard of farming and the level of mechanization and chemicalization and the introduction in production of the achievements of science and progressive experience.

the mili-protection system of frazing, which is based on the application of a complex of special machines and implements and which was developed in Essakhetan, is being applied increasingly on southor and kolkhoz fields.

As important element of the agrotechnics of the cultivation of cereals is observance of the optimum sowing periods. The SZS-2.1 stubble sower, which simultaneously with the seeding performs the presowing till of the soil, the application of mineral fertilizer to the rows and packing, has given a good account of itself under virgin land conditions. Yet the sowkhozes and holkhozes are not receiving these sowers in the necessary numbers. Requests for them were satisfied by less than half in 1979, and this year only 25,000 covers have been allocated against a requirement of 64,000. A similar situation has come about with regard to supplies of other anti-crosion soil-cativating equipment, particularly fl the deep-rippers, long-span cultivators and account harrows. The question of the production of wide-cut fractor-pulled harvesters for cutting the grain, which makes it possible to make afficient use of the fleet of grain-harvesting combines and shorten the harvesting time, werits attention, for example.

The problem of shipment of the grain is no less acute. A large amount of contor vehicle transport is enlisted for the harvesting period every year not only from sectors of the econmy of the republic but also from beyond. Despite the extensive application of progress we grain-shipment methods, the transport situation remains under strain. One path for the solution of this question is the fuller use of wheeled tractors in transportation work. However, the farms do not have a sufficient number of trailers for them.

The effectiveness of the application of phosphate fertilizers is exceptionally high in the principal grain regions of Kazakhstan: I kilogram of active substance in the rotation period produces an addition of up to 10 kilos of grain. There is an appreciable increase in the quality of wheat here. In view of the fertilizer shortage, they are applied to the rows in small doses, as a rule, simultaneously with the seeding. But even here the fertilizer is appliced to only one-fifth of the area of grain crops.

We believe that for an increase in the production of grain and other agrimitural products and a further rise in the yield of the assimilated virgin land there is an urgent need for the accelerated provision of the farms with highly productive wide-cut equipment and a full set of machinery and implements for the soil-protection system of farming and an increase in supplies of phosphate fertilizer. The assimilation are an increase in the productiveness of alkaline soils and the cultivation therein of area grasses and also grain forage crops is an important resource for an improvement in animal husbandry's fodder base. Kazakhstan has considerable areas of diverse alkaline soils, and alkaline patches are encountered on the 8 million hectares of plowland.

The scientific research establishments have formulated methods, techniques and implement models for austrilating the sikali soils of different meliorative categories. Approximately 0.0,000 bectares of such land have been assimilated in the past in the republic. However, the shortage of special implements is a serious brake on the melioration of the said land. To solve this problem the enterprises of the Ministry of Agricultural Machine Building must accelerate the production of trenching and three-tiered plows for the "Kirovets" tractors and also other implements recommended by the scientific research obtablishments.

Much is being done in the republic on the specialization and concentration of agricultural production and the expansion of interfarm cooperation. Approximately 170 complexes and specialized economic associations for the rearing and fattening of catile, 35 dairs and 16 hog-breeding complexes, 14 poultry-breeding associations and a karakul sheep-bearing science-production association have been created. They have, as a rule, higher animal productiveness and lower lands and relies appenditure per unit of output. Average live weight pur head of cattle sold for meat in the first 2 months of the current year in the republic as a whole was 433 kilos, 485 kilos on the farms of Kustanayshaya Object and 434 kilos in Semipalatinskaya Oblast. Specialized farms produce over 15 percent of the eggs, 66 percent of the mutton, so percent at the port and so percent of the wool in the total production of these procests in the public sector. In the final year of the five-year plan the southeres and kalkhozes have undertaken to sell the state more than 1.5 million tons of livestock and poultry, 2.32 million tons of milk, 1.92 billion eggs, 2.56 million astrakhan lambskins and 121,100 tons of wool.

It should be mentioned that the mechanization of laborious processes in animal husbandry is only growing slowly and constitutes 61 percent in hogbreeding sections, 48 percent in cattle sections and only 6 percent in sheep-breading sections. In fustry is producing a considerable amount of various equipment for feed preparation and other purposes, but it is insufficiently productive, as a rule, and is not streamlined, which is creating difficulties in the comprehensive mechanization of the stockbreeders' labor. The farms are obtaining an extremely inadequate amount of equipment for the dairy sections.

in solving the problem of strengthening the fodder base the sovkhozes and kolkhozes have increased the production of coarse fodder. Progressive methods of feed accumilation and preparation are being employed increasingly extensively. Sowings of fodder crops on irrigable land, including that which is irrigated thanks to the use of subsoil waters, are being expanded,

and the areas of irrigated pasture are growing. Measures are being adopted to increase the fodder's albumin centent. It is planned to increase soybean production to 120,000 tons in the next five-year plan in the southern oblasts, which will make it possible to increase the mixed sowings of corn and soybean. Podder from these crops contains much in the way of nutrients and particularly digestible protein. Sowing of alfalfa are being expanded.

However, despite the work which is being done, the fodder production volumes fall short of animal husbandry's requirements, and in a number of places the coarse fodder is of low quality. The reasons for this are the long time taken by the having, the infringement of fodder-procurement techniques and the shortage on the farms of storage pits for the silage and having. Some 25-30 million bectares of hayfield and pasture situated in the dry steppe regions are cut annually in view of the low yield of natural fodder land in the republic.

There is an urgent need for the production of a complex of wide-cut hay-harvesting machines making it possible to combine in a single technological process the mowing, raking, collection and transportation of the grass and highly productive machinery and equipment for the muchanization of operations in the livestock sections, including feed preparation. It is essential to farms' interest in increasing the production of soybean and other albuminhigh fodder crops.

The successful fulfillment of the plans of the republic's economic and social development is closely connected with the operation of all types of transport, primarily railroad transport. The division of the Kazakh Rail-road and the organization on the basis thereof of the Alma-Atinskaya, Zapadno-Kazakhstanskaya and Tselinnaya lines has made it possible to improve the management of the line enterprises and decide questions of the operation of the rolling stock more concretely and efficiently and has been positively reflected in a rise in the technical-economic indicators.

However, railroad transport is still not fully catering for the transportation needs of the economy and the public, and a number of the most important routes and line sections is operating at the limit of throughput and capacity and holding back the progress of the increasing volumes of car traffic, and there are insufficient double-track lines and points. The lines lack the necessary base for repair of the diesel engine fleet. The inadequate degree of housing and shortcomings in cultural-social services for the railroad workers are giving rise to the turnover of mass-occupational personnel.

It is essential to do away with the "bottlenecks" on the heavy freight traffice routes and create the corresponding throughput potential. Together with intensification of the existing lines it is necessary to build a number of new tracks and also to accelerate the electrification of individual sections. An improvement in the location of the production forces is a factor of inscreased production efficiency. The treation of territorial production complemes corresponds must fully to the solution of this problem. The Paviodar-Ekibatuz, Kustanay-Lisakovsk, Temiliau raraganda, Vostochus-Kazakhstan, Karatau-Dehambul, Mangyahlas and other territorial production complemes are being formed in the republic. The practice of their organization revealed certain problems demanding an improvement in planning the development of sectors and a comprehensive solution of the questions connected with people's life and routine. In the interests of the speedlest formation and propertional development of the territorial production complemes it is advisable to establish the indicators of industrial, housing and cultural-social construction in a separate paragraph within the plan of the republic's sconomic and social development and to entrust their fulfillment to a single specialized construction organization.

A new surge of the statilve activeness of the manner was aroused by the high evaluation of the selfless labor of the republic's workers, kelkhar members and people's intelligentsia in 1979. The Earakh SSR, including 5 of its oblasts, 5 cities and 19 rayons, and the 86 best callectives of industrial enterprises and associations, construction, scientific research and planning organizations and sovahozes and knikiczes were recognized the winners in all-union socialist competition for the shead-of-schedule fulfillment of the plan quotas of the fourth year of the fivo-year plan and were swarded challenge red bannars of the CPSU Central Committee, USSR Council of Ministers, AUCCTU and Rommomol Central Committee.

The results of the economy's development in the current year testify that the republic's diversified concern has made a confident start to the final year of the 10th Five-Year Flan. The scope of socialist competition is broadening, and hundreds of labor collectives and thousands of production paresetters had fulfilled the five-year quotas by the 110th anniversary of V. 1. Lenin's birtis. The quotas for the production and sale of the basic types of output are being met successfully and a growth in labor productivity has been achieved in limitatry. The republic's rural workers are working intensively on the fulfillment of the plane for the production and purchases of agricultural products.

The hazakhatan working people are fully remaived on the basis of the further development of socialist competition, the commissioning of production potential and active struggle for increased social production efficiency to fulfill the quotas of the 1980 plan and the adopted pleages shead of schedule and make a worthy contribution to the a complishment of the tasks determined by the 25th CPSU Congress.

COFYR'CHT: Izdalel'stro "Ikmonika", "Flanovoye khozyaystvo", 1980

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#### OFFICIAL STRESSES ROLE OF SUPPLY IN REGIONAL DEVELOPMENT

Moscow HATERIAL 'NO-TEXHNICHESKOYE SNABZHENIYE in Russian No2, Feb 80 pp 20-24

Article by S. Tolstikev, deputy director of the Siberian branch of the Scientific Research Institute of Material Supply: "In Indissoluble Unity"

Text 7 The decree of the CPSU Central Committee and the USSR Council of Ministers "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Work Quality" points out the need to work out programs to develop certain regions and territorial production complexes (TPC).

A clearly organized and stable system for supplying materials and equipment is of great significance in ensuring that a TPC functions optimally. For this reason it is timely and important to consider how TPC consumers can be provided with material resources.

The ever intensifying process of the territorial division of labor and the spatial concentration, specialization, cooperation and combination of production is the objective basis for the formation of territorial production complexes under certain natural geographic and socio-economic conditions. In recent years territorial production complexes, which constitute a progressive form of territorial integration of production, have become more and more common, especially in the rayons of Siberia and the Far East; this process is in accordance with the decisions of the 25th CPSU Congress.

The advantages of socialist planning provide not only for the accumulation or concentration of various production units within a given area; they also provide for the purposeful establishment of effective regional economic subsystems which provide the basis for the TPC. In these subsystems all the components of the economic complex must be balanced and rationally combined in the most optimal proportions, which are developed when the regulating influence of the economic laws of socialism effects the territorial organization of public production.

The fundamental components of the TPC which are considered during the process of territorial planning and pre-planning technical-economic elaboration as one integral economic unit include the followings territory; the natural, labor and other resources; Production (branches of specialization, sumiliary and service production units); the infrastructure; the system of population distribution; internal and external communications; and the relations within the "production--environment--population" system.

The problem of the TPC infrastructure has been attracting more and more attention recently. The correct use of the advantages derived from combining inter-related enterprises into a TPC can ensure that a significant economic benefit is obtained from the joint establishment and use of infrastructure facilities by all the enterprises of the complex. In this regard it is very important—both theoretically and practically—to consider the issues related to the formation of one of the most important elements of the production infrastructure, the commodity distribution network of material—technical supply enterprises (bases, warehouses, stores), which provides for the circulation of the industrial means of production and the temporal continuity of the process of production and consumption.

#### The Growing Role of Supply Enterprises

The further intensification of the territorial division of labor contributes to improvements in the level of economic interrelatedness of territorial-production formations of various types, and it also gives rise to the need for operational, flexible manipulation of material resources. The result is a growing role for distribution and exchange within the regional reproductive process, while the external and internal economic links become one of the most important elements in regional economic subsystems.

Under the influence of intensive exchange, the economy of the TPC is becoming more "open" in comparison with other forms of the territorial organization of productive forces. According to available data, external exchange in the production and consumption of output (calculated in physical terms) amounts to an average of 15-20 percent for the Union republics, 35-40 percent for the economic regions, 50-60 percent for the TPC's and 50-90 percent for the industrial centers. For this reason the issues related to the improvement of the material-technical supply system for the TPC are becoming very timely. They are of particular significance for the eastern regions of the country because the specific features of these regions include the focal nature of the distribution of production forces and great distances.

The material-technical supply system as an element of the TPC production infrastructure fulfills the following basic functions: a supply and marketing function in the circulation of the means of production:

the collection, repair and supply of packaging materials; the procurement and processing of secondary materials.

In addition, it has recently become more and more common to supply the largest enterprises and facilities under construction with material resources through the state system of material and technical supply based on orders placed by construction and installation organizations; this makes possible the most rational use of material resources as well as a reduction in the labor intensity of construction work and in the amount of time required for construction.

In accordance with the decree of the CC CPSU and of the USSR Council of Ministers concerning improvements in the planning and the mechanism of economic management, USSR Gossnab is required to complete by 1981 the transition of construction projects included in the state plan for capital construction to a comprehensive material supply system through the territorial organs of material-technical supply based on orders placed by construction and installation organizations in accordance with their needs, as determined by plans and estimates.

At the request of the consumers the supply and sales organs may also tender various production services: the centralized delivery of freight, the preparation of materials for production use (the cutting out, packing, sorting of output or the collection of complete sets), the leasing of instruments and equipment for measurement processes, informational-accessory services, etc. The material-technical supply system determines to a significant degree the nature of the production links on the basis of supplies of the means of production, the formational structure of total reserves, the forms and methods for satisfaction of the needs of TPC consumers, the reliability, regularity and promptness of supply.

The fermation and development of a TFC as a progressive form of the territorial organization of an economic unit creates the preconditions for the concentration of all types of activities by the organs of supply and sales within the single non-departmental system of enterprises and organizations of USSR Gossnab, a system which is adequate to the developmental level of the production forces in these territorial formations. The TFC's give rise to the objective preconditions for the construction—to be carried out on a shared basis—by the interested ministries and departments of modern, highly mechanized varehouse complexes and other supply enterprises; this will contribute to faster turnover of material resources, to a reduction in total reserves and to the complete satisfaction of consumer needs.

The material-technical supply system determines to a significant degree the nature of the production links on the basis of deliveries of the means of production, the formational structure of total reserves, the methods for the satisfaction of TPC needs, reliability, regularity and promptness of supply.

Within a TPC the material-technical supply enterprises act not only as deliverers of services, but also as major consumers of interindustry resources—capital investments, land, water, labor and other resources which are limited to one degree of another. All this predetermines the need to examine the problems in the development of the material-technical supply system at the same time that one considers the remaining elements of the TPC economic complex.

The Logical Link and Consistency of Work

The formation of a TPC and the balanced development of all the elements of a single economic organism for these territorial production systems is a complex and prolonged process, which can be presented in the form of a standard sequence of procedures logically linked in time or in the form of activities:

scientific-research activity, preplanning preparation;

a direct construction cycle or investment process, including planning and survey work on the design of economic facilities:

the provision of optimal conditions for the functioning of the established TPC's (including the putting of production capacities to work and the process of bringing them up to the planned level).

At every stage of the above-described work the problem of how to improve the provisions for the supply of material resources to TPC consumers has its own characteristic aspects, the essence of which consists of the following.

The Scientific, Proplanning and Prodesign Preparation

The first cycle of work, which is related to the scientific, preplanning and predesign preparation, is extremely significant. At this stage a long-range economic stratugy (conception) for the development and siting of production forces is worked out for the economic and administrative-economic regions of the country as well as for the largest TPC's which make up their framework.

Scientific reports and schemes for the development and siting of branches of the national economy, as well as general schemes for the development and siting of production forces, which are prepared by institutes of the USSR Academy of Sciences, by scientific-research institutes and planning subdivisions of the ministries and agencies, and by the scientific organizations of USSR Gosplan and by the state planning agencies of the union republics, constitute the fundamental scientific and preplanning materials, which are used in the development of the territorial sections of the long-range and five-year plans for the economic and social development of the national economy. These

materials specify the following for the regions of the country: the sequence in which natural resources are brought into the economy; the basic developmental parameters of the branches of economic specialization; auxiliary and service production units; sites and approximate construction dates for the most important economic facilities; the approximate amount of capital investment in the production and non-production sphere; the demand for labor resources; the scale and formational sequence for the production and social infrastructure, etc.

The main predesign technical-economic materials which are worked out by area planning organizations of ISSR Gosstroy the city planning and and of the union republics include the following: the schemes and plus for regional layouts; the plans, designs and developmental projects for cities and settlements and schemes for general plans covering groups of enterprises with common facilities (industrial conters). These documents resolve the complex of economic, architecturalplanning and engineering-technical issues on the most rational use of the area's inter-industry resources, the siting of economic facilities at specific locations, the development of the system of settlement, environmental protection, the centralization and expansion of facilities in the production and social infrastructure, etc. In addition, the comoral plans for the groups of enterprises with common facilities (industrial centers) reflect detailed study of concrete proposals on the establishment of facilities common to the group of enterprises including, transportation, warehouse facilities, water supply, sewer systems, energy supplies and other elements of the production infrastructure, auxiliary production units and farms. These schemes also determine the cost of the facilities common to groups of enterprises, and the amount of resource participation by the enterprises in the construction of these facilities; they contain calculations of the economic effectiveness of the construction of enterprises within the group, as well as proposals concerning the appointment of a head builder of facilities common to groups of enterprises.

Recent scientific-research and planning practice has accumulated a certain amount of experience in the conduct of the scientific, preplanning and predesign preparation of an area for economic development, and a definite system for the organization of this work has been developed. The head executors attract as co-executors a significant number of scientific-research and planning organizations, which study the questions which come under their jurisdiction. However, as a rule, the scientific-research and planning organizations of USSR Gossnab are not brought in to participate in the working up of general schemes for the development and siting of production forces, of schemes and plans for regional layouts, of draft plans and the development of cities and settlements, and of general plans for groups of enterprises with common facilities, and sufficient attention is not given to the future development of a national system of material-technical cupply in the development of these plans.

It should be noted that within the schemes of general plans for groups of enterprises with common facilities, the State Scientific-Research and Planning Institute for the Development of Plans of Structures and for the Organization of Industrial Transportation, which comes under USSR Gosstroy, determines the needs of enterprises in the industrial center with regard to warehouse facilities (area, volume) for the various forms of materials, products and items to be stored; they also resolve problems concerning the combination of certain storage facilities for enterprises which come under various ministries and agencies, as well as problems related to the mechanization of loading and unloading operations, They also specify the locations of storage facilities (storage zones). However, these formulations concern, as a rule, only an insignificant number of the warehouse facilities of the various ministries and agencies; they hardly touch the network of enterprises and organizations which come under USSR Gossnab, nor do they solve the problems of the comprehensive development of the material-technical supply system in a manner that is coordinated with the remaining elements of the TPC economic organism.

The organizational improvement in the material-technical supply system of the TPC will contribute to the more rational use of material resources in the national economy, to the faster turnover of these materials, to a reduction in total reserves, to the fuller and greater satisfaction of consumers' needs, and to the growth of efficiency in all public production. In a report to the 25th CPSU Congress Comrade L.I. Brezhnev emphasized that a solution to these problems was urgently needed.

The successful solution of the problem of how to make rational use of the resources appropriated for the development of the infrastructure will be largely determined by the completeness and depth of the economic and organizational resolution of the problems related to the formation and development of a state system of material-technical supply in the regions at all stages of scientific, preplanning and predesign preparation. It would seem that even at this stage USSR Gossnab must study the following questions: how to determine a TPC's total demand for material resources and production-technical output; how to specify fundamental decisions which link consumers to suppliers: how to establish rational relations among warehouse and transit suppliers and an optimal structure for total reserves; how to determine the needs of material-technical supply enterprises for labor, land, water and other inter-industry resources, the amounts of capital investment for the construction and expansion of facilities in the state system of supply and sales; to establish targets dates for construction and to specify sources of financing; to determine points and locations for USSR Gossnab enterprises, the dynamics for opening warehouse capacities and other materialtechnical supply facilities.

There arises a need for USSR Cossnab to work with USSR Gosplan, USSR Gosstrov, the USSR State Committee on Science and Technology and the USSR Academy of Sciences in determining a procedure for the participation of the scientific-research and planning organizations of Gossnab in all forms of the work on the problems of forming and developing a TPC, as well as on a range of issues which are being resolved at this stage and on providing the groundwork for the long-range development of facilities for a state system of material-technical supply. This will ensure that there is a logical relation and continuity of information, conclusions and proposals to substantiate the future comprehensive development of the material-technical supply system between the remaining elements of the TPC economic complex, and it will make it possible to use in the most rational manner the resources which have been appropriated and, in the end, it will help to provide the optimal conditions for the implementation of the investment programs and the functioning of the TPC's which have been established,

In this way the first aspect of the problem of how to improve the system for supplying material resources to TPC consumers consists of the need to study in a modern and thorough manner the issues related to the most rational organization of the nation-wide system of material-technical supply within various complexes at all stages of the scientific, preplanning and predesign preparation.

Regulating the Construction of Infrastructure Facilities

At the stage of the investment process which includes the planning and exploratory work and the actual construction cycle, the problematic aspects of the development of the material-technical supply sector in the TPC are mediated through the existing system for planning and construction.

At the present time a unified procedure has not yet been established for the planning, designing and financing of the construction of production infrastructure facilities in the TPC. As a result, the rapid development of the infrastructure has not been ensured; a lack of balance and coordination has appeared, and the effectiveness of the formation and development of these area production systems is being reduced.

Problems related to transportation and communication facilities in the TPC are in practice resolved in the following manner. Firstly, the construction of these facilities is carried out with capital investments from the transport ministries and agencies and from the USSR Ministry of Communication. Secondly, expenditures for the building portion of transportation and communications facilities are included in the consolidated estimates or in the summary of expenditures for technical-operational plans for the construction of enterprises regardless of departmental affiliation. And, finally, transportation and communication facilities, when enterprises are located within a group of enterprises

(an industrial center), are included among those facilities which are common for a group of centerprises, and they are built through the shared participation of the concerned ministries and agencies. In the latter case individual technical-operational plans with total estimates are worked out for the construction of transportation and communication facilities by the head contracting enterprise of the center.

Storage facilities for industrial enterprises, in construction and transportation are created largely through capital investments by the corresponding ministries and agencies. If enterprises are located within a group, these facilities are expanded by combining warehouses of the same kind according to the types of materials, output and items which are stored, and they are included among the facilities which are common for the group of enterprises; they are built with the proportional participation of the interested ministries and agencies.

Facilities of the state material-technical supply system within the TPC are built, as a rule, only with capital investments appropriated by USSR Gossnab. Only in rare cases are capital investments attracted from the consumers for the development and improvement of the material-technical base of the USSR Gossnab system.

Hardly any purposeful work is being carried out to unite, centralize and expand the material-technical supply facilities and to create within the TPC a single state supply system. As a result, there exist major deficiencies in the organization of their supply system. As a rule, various departmental supply and sales organizations are engaged in providing the means of production for existing enterprises, for enterprises under construction and for other economic facilities of these territorial formations.

The developmental scale and rate of the material-technical base of USSR Gossnab in the TPC do not enable the state supply system to fulfill all the functions related to the provision of material resources to the consumers of the complexes. All this leads to the inadequate use of the advantages of the state system of material-technical supply for the national economy, to the dispersion of material resources, to the creation of an inefficient storage system, which is poorly equipped, scattered and narrowly departmental in nature, as well as to duplication of work and other negative phenomena.

In order to eliminate the above mentioned inadequacies in the organization of TPC material-technical supply the following should be carried out at the stage of the planning and exploratory work and at the actual construction cycle:

extend to the construction and to the development of the materialtechnical base of USSR Gossnab in the TPC the existing situation with regard to the planning and financing for other elements of the production infrastructure—the transportation and communication facilities; develop a state policy concerning a unified procedure for the planning, designing and financing of the construction within the TPC of production infrastructure facilities (transportation, communications, material-technical supply);

introduce a section entitled "The Organization of Material-Technical Supply" into the the materials included in the general plans for groups of enterprises with common facilities (industrial centers). Create in these centers material-technical supply facilities common to the group of enterprises, and carry out their construction through proportional participation of the interested ministries and agencies. At the end of construction these facilities for the supply of production-technical output must be turned over to USSR Gossnab. In this regard, it should be taken into account that, according to USSR Gosstroy data, the construction costs for facilities common to groups of enterprises, are reduced by approximately 20 percent in comparison with the construction costs for each ministry and agency individually;

introduce as part of the process of formulating the assignments for the planning and development of the technical and economic substantiation for the construction of enterprises and economic facilities the practice of coordinating planned decisions concerning the organization of material-technical supply and storage with the organs of USSR Gossnab;

change the construction organizations which carry out TPC construction to a system under which they are supplied with production-technical output through the area organs of USSR Gossnab according to orders placed by these construction organizations in accordance with their needs as determined by plans and estimates.

Providing Optimal Conditions for TPC Functioning

At the final stage of the formation of complexes the solution of the following aspects of the problem of how to improve the organization of the TPC material-technical supply acquires great significance in the provision of optimal conditions for the functioning of the regional economic systems which have been established:

the establishment of the necessary material-technical base for the state supply system which is adequate to the developmental level of the TPC production force;

the improvement of the technical level of enterprises for the supply of USSR Gossnab output, as well as the level of organizations and enterprises which produce secondary raw materials and packaging, with the higher levels to be achieved through the application of progressive volume-planning and design decisions, highly productive types of machinery and equipment, calculating equipment, and equipment for the automation and mechanization of lifting, transport, loading and umloading warehouse work;

the stage-by-stage transfer of TPC consumers to a system under which material resources are supplied through the state supply system as the necessary material-technical base is created;

improvement in the level of material-technical supply planning (a combination of the industrial, territorial and programmed aspects of planning), the improvement of the existing procedure for the distribution, specification and assignment by order of production-technical output;

the application of progressive forms for providing consumers with material resources (the development of supplies on the basis of direct, prolonged economic links; the comprehensive supply of output necessary for the fulfillment of plan targets in the established amounts and variety. the transition to centralized delivery of output to consumers from supply and sales bases of the area organs of USSR Gossnab on the basis of coordinated schedules; the expansion of the wholesale trade; the organization of intra-rayon and inter-rayon warehouse sorting of output and others);

the rational use of material resources, side-products, secondary materials and other resources;

the concentration of TPC material-technical supply management through the creation of major associations for the supply of production-technical output with centers to extend to consumers services of a production nature, the rolled products for instruments and other technical means;

the further development and improvement of cost-accounting relations in the material-technical supply organizations;

the organization of purposeful work carried out by output supply enterprises and aimed at the protection of the environment;

the solution of problems in the area of social development concerning the collectives of material-technical supply employees; the improvement of working conditions, the improvement of vocational skills, education and the household and medical services offered to workers.

The successful resolution of these issues, would seem to contribute to the improvement of the material-technical supply system for territorial production complexes and industrial centers.

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